

STORM WATER MANAGEMENT PROGRAM

Submitted to:

State of Utah Department of Environmental Quality Division of Water Quality

Submitted by:

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GLOSSARY

BMP Best Management Practice

DEQ Department of Environmental Quality

EPA Environmental Protection Agency

IDDE Illicit Discharge Detection and Elimination

MEP Maximum Extent Practicable

MS4 Municipal Separate Storm Sewer System

NOI Notice of Intent

NOT Notice of Termination

NPDES National Pollution Discharge Elimination System

O&M Operation and Maintenance

SLVHD Salt Lake Valley Health Department

SOP Standard Operating Procedure

SWMP Storm Water Management Program

SWPPP Storm Water Pollution Prevention Plan

UAC Utah Administrative Code

UPDES Utah Pollution Discharge Elimination System

CHAPTER ONE

PUBLIC EDUCATION AND OUTREACH PROGRAM

This chapter will summarize Taylorsville City's approach for addressing the Public Education and Outreach on Storm Water Impacts minimum control measure (Permit Requirement 4.2.1).

The Public Education and Outreach Program of the Storm Water Management Plan (SWMP), in partnership with the Salt Lake County (SL County) Stormwater Coalition, addresses increasing public and professional awareness of water quality concerns and Best Management Practices (BMPs) that may be implemented to protect storm water throughout Taylorsville City. The BMPs described in this chapter target the following audiences: (1) residents, (2) businesses, institutions, and commercial facilities, (3) developers and contractors, and (4) MS4 industrial facilities.

SALT LAKE COUNTY STORMWATER COALITION

The SL County Stormwater Coalition is a partnership of SL County, Cities in the County, Salt Lake Valley Health Department and the Utah Department of Transportation. Taylorsville City has entered into an interlocal cooperation agreement with SL County and is currently filing jointly on the Jordan Valley Municipalities UPDES permit.

The Coalition was formed with the purpose of cleaning up storm water pollution in SL County by educating SL County residents about storm water, what it is, why storm water quality is important and methods to improve storm water quality. The objective is to reach local residents through TV advertising, media coverage, its website, social media, the Water Quality Fair and public events.

The Coalition's budget for the education program is established annually. SL County, as the lead entity, is the largest contributor with the remaining budget split between the Cities and based upon the population of each of these participating members. The type of media and the distribution schedule are discussed by the Coalition members. The SL County Stormwater Coalition current members are:

Salt Lake County Bluffdale City Cottonwood Heights	Holladay City Midvale City	South Jordan City Taylorsville City
Draper City Herriman City	Murray City Riverton City Sandy City	West Jordan City West Valley City

Taylorsville City's Engineering Department will continue participating in the Coalition and supporting the Public Education and Outreach Program established by SL County in its SWMP.

The Salt Lake County Stormwater Coalition shall provide the following:

<u>Water Quality Fair</u>: SL County hosts an annual two-day, County-wide Water Quality Fair at Utah's Hogle Zoo for fourth graders to learn about storm water, water conservation, the water cycle and other water topics. Admission is free for these fourth graders and Taylorsville City is working with its schools to assist with transportation costs to encourage and increase participation among its fourth grade classes.

School Program: SL County has developed and made available a School Program that will provide students with educational materials, demonstrations and outreach activities regarding the impact of daily activities on storm water quality. SL County and the Coalition have compiled 20 lesson and activity plans to teach about storm water and demonstrate the importance of preventing litter and keeping storm water clean. The plans were correlated to standards and objectives of the Utah state science curriculum and made available to schools. The curricula provide teachers with educational tools, supplemental activities, and games for all elementary grade levels to encourage storm water quality education.

<u>Multimedia Approach:</u> The multimedia effort is geared toward creating a recognizable brand and educating residents on storm water. The Coalition has successfully negotiated and developed media partnerships with local television (KSL, KUTV and KSTU). Its television ads, specifically the "We All Live Downstream" videos, continue to develop name recognition and awareness among the target audiences. The Dr. Strangewater video is available on the Coalition website and the DVD has been made available to schools for educational use.

The joint website managed by the Coalition provides Taylorsville residents with one place to go to obtain more detailed information and education about storm water. It also provides an easy link to the Taylorsville and other Coalition Cities' websites. Other social media avenues utilized by the Coalition for teaching include Twitter, YouTube, and Facebook.

<u>Educational Materials</u>: SL County provides access to and distributes an assortment of educational materials designed to inform communities of the impacts of storm water discharges on local water bodies. The educational materials, pamphlets, and handouts target the four audiences and are made available to Coalition communities for local events, programs, and general distribution.

Storm Drain Stenciling Program: This program employs community groups to paint stencils or glue markers on storm drain inlets to raise awareness and decrease illicit dumping and littering. Common groups that participate in the storm drain stenciling program are Eagle Scouts, Girl Scouts and school groups. The County supplies the groups that wish to participate with either stencils and paint or the curb markers and glue and instructs the groups as to the locations of where the stencils/markers are needed. The County documents the number of participants and storm drains that are stenciled.

<u>Public Events:</u> The Coalition participates in information booths each year including the SL County Stormwater Quality Fair and County Fair. Information brochures and hand-out items are distributed at these booths. The booths provide a forum for the public to respond to and comment on the storm water program.

Permit Requirement 4.2.1.1. Pollutants and Pollutant sources targeted

Objective: Reduce pollutants to receiving waters by increased public awareness of problems and solutions.

Resource Allocation: Funding for this will be provided by SL County/Taylorsville City.

Implementation and Assessment:

Taylorsville City's Public Works Division, in conjunction with the SL County Stormwater Coalition, will continue to educate its target audiences about potential impacts from storm water discharges; methods for avoiding, minimizing, reducing and/or eliminating adverse impacts; and actions that individuals can take to improve water quality.

Everything storm water collects from the land surface, roadways, sidewalks, parking lots, construction

sites, business parks, etc., is carried to gutters, stormdrains, canals, drainageways, and finally ends up in our local rivers and streams untreated. The best way to improve storm water quality is to treat the source don't let runoff get polluted in the first place. Taylorsville and the Coalition's, effort is being expended to educate target audiences on how individuals can clean up these "non-point source" pollutants. The pollutants that will be targeted include sediments, waste (animal and human), chemicals, detergents, fertilizers, pesticides, herbicides, hydrocarbons, heavy metals, de-icing salts, nutrients and pathogens.

Permit Requirement 4.2.1.2. Information given to the general public

<u>Objective</u>: Provide and document information on water quality impacts associated with improper disposal of waste to the general public.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department will provide and document information given to the general public of the City's prohibitions against and the negative water quality impacts associated with illicit discharges and improper disposal of waste. The main topics of education include: effects of lawn care (use of pesticides, herbicides, and fertilizers), proper yard waste disposal, effects of automotive work and car washing on water quality, and proper management of pet waste.

City Newsletter: Information regarding the impacts associated with illicit discharges and improper disposal of waste will be featured in the City newsletter or on the City website.

Information Booths: Information booths are to be held at community events such as Taylorsville Dayzz. A series of pamphlets and other education materials will be displayed that explain how the public can help reduce non-point source pollutants exposed to rainfall. Content may vary and will consist primarily of the current information developed by the SL Stormwater Coalition.

Pamphlets: A series of pamphlets that explain how the public can help reduce non-point source pollutants exposed to rainfall will be made available to the general public in the City Hall and on the City's website. Content may vary and will consist primarily of the current information developed by the SL Stormwater Coalition.

Year	Measurable goal action summary: 1. Document city newsletter content and publication month/ quarter 2. Document date and location for information booth, people reached and information given.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.1.3. Information given to businesses and institutions

<u>Objective</u>: Provide and document information on water quality impacts associated with improper disposal of waste from businesses and institutions.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department will provide and document information given to businesses and institution regarding the City's prohibitions against and the impacts associated with illicit discharges and improper disposal of waste. Information will be distributed once a year to established businesses and institutions. Information will be distributed to new entities during the license application process. Information will be distributed to entities applying for any building permit that may impact the storm water quality.

The main topics of education include: proper management of waste water (illicit connections to the storm drain system), effects of lawn care (use of pesticides, herbicides, and fertilizers), proper yard waste disposal, proper management of parking lot surfaces and use of de-icing salts and chemicals, proper storage and management of raw materials, proper management of waste materials and dumpsters (emphasizing pollution prevention and Industrial MSGP), effects of automotive work and car washing on water quality, and proper management of pet waste.

Information publications will be produced in conjunction with the SL County Stormwater Coalition. This education will also be part of the Illicit Discharge Detection and Elimination measure (Part 4.2.3.).

Year	Measurable goal action summary: 1. Document business or institution that was reached. 2. Document date and type of information given.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.1.4. Information given to engineers, construction contractors, developers, development review staff, and land use planners

<u>Objective</u>: Provide and document information concerning storm water pollution prevention plan (SWPPP) development and BMPs for reducing adverse impacts from storm water runoff from development sites to engineers, construction contractors, developers, development review staff, and land use planners.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department has adopted the Utah/ EPA SWPPP template for construction activities and the City's Common Plan of Development SWPPP template as the standard documents to submit along with the City Land Disturbance Permit (LDP). These documents are developed to help reduce the adverse impacts from storm water runoff from development sites.

A pre-application meeting is held between a Building Division inspector and the developer to go over the LDP requirements, the SWPPP or CPoD SWPPP template, erosion controls, sediment controls, good housekeeping controls and post-construction controls.

- Training session regarding UPDES regulations; SWPPP development, review and management, BMP selection and maintenance; SWPPP inspections and other topics will be offered through the SL County Storm Water Coalition, the Utah Storm Water Advisory Committee (USWAC), or American Public Works Association (APWA) as demand dictates. Training records will include dates, course description and names and positions of staff in attendance.
- The Engineering Department will document the number of pre-application meetings held with engineers, construction contractors, and land developers regarding SWPPPs.

Year	Measurable goal action summary: 1. Document training dates, attendance and course description. 2. Document number of pre-application meetings.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.1.5. Information and training given to city employees

<u>Objective</u>: Provide training to City employees regarding the City's prohibition against and impacts associated with illicit discharges and improper disposal of waste.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Public Works Division, in conjunction with other City Divisions, will provide and document and retain records of training to address the impacts associated with illicit discharges and improper disposal of waste to City employees that may, as their everyday activities, impact the water quality in the storm drain system.

The main topics of education during this training include: equipment inspection to ensure timely maintenance; proper storage of industrial materials; proper management of waste water and illicit connections to the storm

drain system, effects of lawn care (use of pesticides, herbicides, and fertilizers), proper yard waste disposal, proper management of parking lot surfaces and use of de-icing salts and chemicals, proper storage and management of raw materials, proper management of waste materials and dumpsters, and proper management of pet waste.

Year	Measurable goal action summary: 1. Document training dates, staff attending and course description.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.1.6. Information and training given to MS4 engineers, development and plan review staff, land use planners, and other applicable parties

<u>Objective</u>: Provide training to MS4 engineers, development and plan review staff, land use planners, and other applicable parties regarding Low Impact Development (LID), green infrastructure, post-construction control, and associated BMPs.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department will select LID post-construction BMPs appropriate for the soil characteristics and terrain of the city for the City to adopt. Training opportunities will be sought out and tailored to help develop and facilitate this program. Training will be scheduled on an annual timetable and will be taught by Public Works, and professional education program opportunities sanctioned by various organizations including SL County, USWAC, and APWA.

Year	Measurable goal action summary: 1. Evaluate and select for adoption LID post-construction BMPs. 2. Document training dates, staff attending and course description.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.1.7. Evaluate program effectiveness

<u>Objective</u>: Provide training to MS4 engineers, development and plan review staff, land use planners, and other applicable parties regarding Low Impact Development (LID), green infrastructure, post-construction control, and associated BMPs.

Resource Allocation: Funding for this will be provided by SL County/Taylorsville City Storm Water Utility Fund.

Implementation and Assessment:

SL County is responsible for hosting and coordinating the SL County Stormwater Coalition, as well as conducting the administrative tasks to ensure the Public Education and Outreach Best Management Practice is fulfilled. The Coalition commissioned a Dan Jones poll to assess the effectiveness of its joint branding identity of "Droplet" and the slogan "We All Live Downstream. Results demonstrated that 77% of the SL County knew and recognized these key elements of the Coalition campaign with 84% recognizing the television ads. The Coalition will continue to conduct follow-up surveys to determine the effectiveness of the ongoing education program and ensure its success in providing the public with knowledge and encouraging public action in keeping storm water clean.

Permit Requirement 4.2.1.8. Rationale for selected BMPs

<u>Objective</u>: Provide written documentation or rational as to why the BMPs have been chosen for Taylorsville's public education and outreach program.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

The SL County Coalition covers the Public Education and Outreach Program UPDES requirements for all participating Jordan Valley Municipalities. SL County has prepared a Guidance Document for Stormwater Management with an array of BMPs selected based on their compliance with the permit requirements to assist public agencies, developers, engineers, designers and the general public in improving storm water runoff quality.

Taylorsville references the BMPs in SL County's Guidance Document to be used as tools to provide further information on management of storm water pollutants. This array of BMPs was selected by Taylorsville City as they effectively address the land uses and target audiences within the City.

CHAPTER TWO

PUBLIC INVOLVEMENT/ PARTICIPATION PROGRAM

This chapter will summarize Taylorsville City's Public Involvement/ Participation Program (Permit Requirement 4.2.2).

The Public Involvement/Participation Program chapter of this SWMP addresses Taylorsville City's compliance with applicable State and Local public notice requirements. The Program addresses the importance of public involvement with respect to protection of storm water. Community participation provides for broader public support, shorter implementation schedules, a broader base of expertise and the development of important relationships with other community and government programs. The BMPs described in this section of the SWMP includes opportunities for the public to play an active role in the development and implementation of the SWMP. Such opportunities include the public notice process and efforts to reach out and engage potential stakeholders of all economic and ethnic groups and additional community programs to foster public input.

Taylorsville City's Engineering Department will review the SWMP once a year.

Permit Requirement 4.2.2.1. Public Input Opportunities

<u>Objective:</u> Provide opportunities for public involvement in the development, implementation, and update of the SWMP document.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department will provide opportunities for public to provide input in decision-making processes of the SWMP document including the development and adoption of all ordinances or regulatory mechanisms.

A web-based system will be developed by the City to accept comments about the Stormwater Program and the SWMP.

Permit Requirement 4.2.2.2. and 4.2.2.3. Public review of the SWMP document

Objective: Make the SWMP available for public review and input for the life of the Permit.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department has made the 2013-2018 SWMP available to the public for review.

The latest version of the SWMP document will remain available for public review and input for the life of the permit on Taylorsville City's website.

Permit Requirement 4.2.2.4. State and Local public notice compliance

Objective: Comply with all State and Local public notice requirements.

• <u>Public Notice</u>: Public notice requirements shall be conducted in accordance with the State Administrative Procedures Act. Public notices shall be published and public comments received. Appropriate responses will be documented.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: The table below represents measurable goals for this BMP to be implemented and assessed during the permit term. The purpose of measurable goals is to gauge permit compliance and program effectiveness in following the schedule identified.

Year	Measurable goal action summary: 1. Document public notices issued 2. Document public notices advertised and the number and content of responses to the notices
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

CHAPTER THREE

ILLICIT DISCHARGE DETECTION AND ELIMINATION

This chapter will summarize Taylorsville City's Illicit Discharge Detection and Elimination (IDDE) program (Permit Requirement 4.2.3).

The Illicit Discharge Detection and Elimination Program chapter of the SWMP addresses non-storm water flows that are discharged to receiving waters via Taylorsville City's storm water conveyance systems. The program will implement BMPs to assist in the identification of illicit discharges and removal of these discharges from the system. This program will also focus on prevention of new illicit discharges to the storm water system by means of education, regulations and through spill prevention and response.

This program will also be integrated with the Public Education and Outreach program (Part 4.2.1.) to promote awareness of the importance of protecting the storm water system from illicit connections and discharges and their impact to receiving waters. The following BMPs describe implementation talks and assessment tasks to be completed by the City for the Illicit Discharges and Improper Disposal Program.

STORM DRAIN SYSTEM MAP

Permit Requirement 4.2.3.1. Current storm drain system map

Objective: Update and maintain a current storm drain system map.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department and the GIS Coordinator will continue mapping all storm drain systems within its MS4 boundaries. Storm drain facilities will be surveyed and placed into a GIS system for accurate mapping used by the City. Storm drain outfalls will be inventoried with respect to pipe locations, pipe size, pipe material, and pipe condition. Mapping will provide names and locations of all State water bodies that receive discharges from these outfalls.

Year	Measurable goal action summary: 1. Document number of storm water infrastructure, facilities and outfalls mapped 2. Document ongoing survey, data entry, and drafting updates for storm drain system map
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

STORM WATER ORDINANCE

Permit Requirement 4.2.3.2. Ordinance to prohibit illicit discharge

Objective: Prohibit non-storm water discharge through ordinances or other regulatory mechanism.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment:</u>

Taylorsville City has a draft storm water ordinance that prohibits illicit discharges into the storm drain system and includes appropriate enforcement procedures and actions. This document is based upon the draft ordinance compiled by the Storm Water Subcommittee of the Utah Chapter of the American Public Works Association. The document has been revised specifically for Taylorsville City and is under review by City staff and legal counsel before the City moves to adopt the ordinance.

- Section 8 Illicit Discharges: Illicit discharges are defined as any discharge to the storm drain system that is not composed entirely of storm water. The ordinance addresses non-storm-water discharges to the MS4 including prohibited discharges, prohibited obstructions, illicit connections and illicit discharges or spills. Examples of illicit discharges include sanitary wastewater, improper disposal of waste oil, paint, household toxics and spills from roadway accidents. Exceptions to this definition are as follows (refer to UPDES Permit, Part II.F.3.d.):
 - Water line flushing
 - o Diverted stream flows
 - o Rising ground waters
 - o Uncontaminated ground water infiltration to separate storm drains
 - o Discharges from potable water sources
 - Uncontaminated footing/foundation drains
 - o Uncontaminated water from crawl space pumps
 - o Air conditioning condensate
 - o Irrigation water
 - o Springs
 - Lawn watering
 - o Individual residential car washing
 - o Flows from riparian habitats and wetlands
 - Street wash waters
 - o Discharges or flows from emergency fire-fighting activities
- Section 9 Enforcement and Section 10 Penalties: The ordinance also addresses enforcement and penalties (**Permit requirement 4.2.3.2.1.**). A variety of enforcement options are presented in order to apply escalating enforcement procedures as necessary for the severity of violation.

Taylorsville City's Engineering Department and its legal council will work to adopt the Storm Water Ordinance in 2019 and, thereafter, will continue to update it, as needed, to effectively prohibit illicit discharge.

Year	Measurable goal action summary: 1. Adopt ordinance 2. Document updates to the ordinance 3. Document any investigation efforts and enforcement actions taken under this ordinance
7/1/2019- 6/30/2020	

7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

DRY WEATHER SCREENING PROGRAM

Permit Requirement 4.2.3.3. Development and implementation of the dry weather screening

Objective: Develop and implement a plan to detect and address illicit discharge.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department is developing and will adopt written standard operating procedures (SOPs) for its dry weather screening program to detect and remove non-storm water discharges to its MS4. The SOPs shall address responses to prohibited discharges, prohibited obstructions, illicit connections and illicit discharges or spills. These SOPs will be reviewed on an annual basis and updated as needed.

Permit Requirement 4.2.3.3.1 Develop and implement written procedure for dry weather screening

Objective: Develop and implement a written SOP for identifying priority, or high risk, areas for illicit discharges.

Implementation and Assessment:

Taylorsville City's Engineering Department is developing written systematic procedures for locating priority areas likely to have illicit discharges. This procedure will be completed and ready for implementation by December 2019. Criteria for selecting these areas will include:

- Areas with older infrastructure that are more likely to have illicit connections;
- Industrial, commercial, or mixed use areas;
- Areas with a history of past illicit discharges;
- Areas with a history of illegal dumping'
- Areas with onsite sewage disposal systems;
- Areas with older sewer lines or with a history of sewer overflows or cross-connections; and
- Areas upstream of sensitive water bodies.

A weighted matrix will be developed to prioritize areas of concern and will create and update, as needed, a list of all priority areas identified in the system.

A list of all priority areas in the system will be created and updated annually to reflect changing priorities.

Year	Measurable goal action summary: 1. Develop SOP(s) and weighted matrix for locating priority areas likely to have illicit discharges 2. Document updates
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.3.3.2. Field inspection of outfalls

Objective: Develop and implement a plan for field assessing priority, or high risk, areas for illicit discharges.

<u>Resource Allocation</u>: Taylorsville City resources will be allocated through the Public Works contract between Salt Lake County and Taylorsville City.

Implementation and Assessment:

Taylorsville City's Dry Weather Screening Program consists of inspecting each of the major and minor outfalls that are owned and operated by Taylorsville City for the purpose of verifying outfall locations and detecting illicit discharge. Visual inspections of at least 20 percent of all know outfalls will be inspected annually and all outfalls should be inspected at least once during the permit term.

The Dry Weather Screening Program provides a framework for field screening of the outfalls to identify suspect outfalls as a basis for initiating more detailed drainage area investigations. In addition, the storm drain system map is updated on an annual basis to add and delete outfalls to reflect field conditions as appropriate. All activities conducted under the Dry Weather Screening Program will be documented on an inspection form.

Year	Measurable goal action summary: 1. Create a Dry Weather Screening Program. 2. Document findings of screening program, number of outfalls visited and number of outfalls with suspected conditions.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

ILLICIT DISCHARGE

Permit Requirement 4.2.3.4. Tracing the source of an illicit discharge

Objective: Develop and implement a written SOP for tracing the source of an illicit discharge.

<u>Resource Allocation</u>: Taylorsville City will allocate resources through the Public Works contract between Salt Lake County and Taylorsville City.

Implementation and Assessment:

Taylorsville City's Engineering Department will update and implement its written systematic procedure for tracing the source of an illicit discharge or connection. Currently, Taylorsville City contracts storm drain inspection and maintenance to Salt Lake County Public Works Department. Salt Lake County Public Works Department is to clean and inspect the storm drain system. Any dry weather flows that are identified at that time can be traced to their source.

The SOPs will address how to conduct visual inspections and closed circuit camera inspections as well as when field tests and collecting and analyzing water samples will be necessary. This procedure will be completed and ready for implementation by SL County. The County will be required to inform Taylorsville City of the illicit connection or illegal discharge for the Health Department to pursue enforcement action. Investigations and enforcement actions will be documented.

Permit Requirement 4.2.3.5. Investigating an illicit discharge

Objective: Develop and implement a written SOP for characterizing the nature of an illicit discharge.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department will update and implement its written systematic procedure for characterizing the nature of, and the potential environmental threat posed by an illicit discharge found by or reported by the public through the Police Department's discharge phone number or the Health Department's advertised illicit discharge hotline. These procedures will include detailed instructions for evaluating how the discharge shall be immediately contained and steps to be taken for containment of the discharge. Public Works will investigate the source and will involve other parties if necessary.

Permit Requirement 4.2.3.5.1. IDDE Inspection Report

Objective: Record pertinent non-storm water discharge information in an inspection report.

Implementation and Assessment:

Taylorsville City's Engineering Department will, after identifying and confirming a non-storm water discharge, record the following information on an inspection report:

- The date the City became aware of the non-storm water discharge,
- The date the City initiated the investigation of the discharge,
- The date the discharge was observed,
- The location of the discharge,
- The description of the discharge,
- The method of discover.

- The date of removal, report, or enforcement action,
- The method of removal,
- The date and method of removal verification,
- The decision process for utilizing analytical monitoring/ sampling to aid in the identification of the potential source of an illicit discharge and to characterize the nature of an illicit discharge will be documented in the inspection report.

Year	Measurable goal action summary: 1. Develop IDDE inspection report template. 2. Document number of inspections conducted.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.3.6. Ceasing of illicit discharges

Objective: Develop and implement a written SOP for ceasing the illicit discharge.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department will develop and implement its written systematic procedure for ceasing illicit discharges that will include:

- Notification of appropriate authorities,
- Notification of the property owner(s),
- Technical assistance for removing or eliminating the source of the discharge,
- Follow-up inspections,
- Escalating enforcement and legal actions if the discharge is not eliminated.

The City will require immediate cessation of improper disposal practices upon confirmation of responsible parties.

Permit Requirement 4.2.3.6.1. IDDE investigation documentation

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department will thoroughly investigate and document all illicit discharges. All of the investigation documentation will be kept on file with the Engineering Department and the SWMP electronic files.

IDDE EDUCATION AND PUBLIC OUTREACH

Permit Requirement 4.2.3.7. Illicit discharges and improper disposal information

<u>Objective:</u> Inform public of the hazards associated with improper disposal of waste and implement a written SOP for ceasing the illicit discharge.

Implementation and Assessment:

The Public Education and Outreach Program fulfills this requirement. Refer to Chapter One for program details.

Permit Requirement 4.2.3.8. Household hazardous waste collection

Objective: Promote or provide services for the collection of household hazardous waste.

<u>Implementation and Assessment:</u>

The Public Education and Outreach Program fulfills this requirement. Refer to Chapter One for program details.

Permit Requirement 4.2.3.9. Reporting Hotline

Objective: Publicize the hotline for public reporting of spills and other illicit discharges.

<u>Resource Allocation</u>: Taylorsville City will allocate resources through the Storm Water Utility Fund in conjunction with the Coalition and the SL Valley Health Department.

Implementation and Assessment:

The SL Valley Health Department Emergency Response 24- hour hotline is (385) 468-8888. It is the number listed and advertised to the public for the reporting of spills and other illicit discharges. The public may also call the Police or Fire Departments to report any of these activities. Taylorsville City's Engineering Department will train with the Police and Fire Departments to coordinate and document the nature of call received, follow-up actions taken, and any public feedback received.

Year	Measurable goal action summary: 1. Document number of calls received by each department and how the calls were handled.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.3.9.1. Spill response procedures

Objective: Develop a procedure for spill/dump response to public referrals of illicit discharge.

Implementation and Assessment:

As administrator of the SWMP, Taylorsville City's Engineering Department will work in conjunction with the Fire and Police Departments and SL Valley Health Department to develop a written spill/dumping response procedure and flow chart (for internal use, see SOP's for flow chart). The document will show the procedures for responding to illicit discharges/spills, the various responsible agencies and their contacts, and who would be notified/involved in illicit discharge incidence response. The procedure and chart will be part of the IDDE program and incorporated into each involved department's IDDE program. The plan will be maintained and updated as changes occur.

Year	Measurable goal action summary: 1. Create and approve spill response flow chart. 2. Document and describe changes to the spill response plan.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.3.10. IDDE program evaluation and assessment

Objective: Develop and implement a written SOP for evaluating and assessing IDDE program.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department will adopt procedures for the IDDE program evaluation and assessment that will include a database for mapping and tracking the number and type of spills or illicit discharges and tracking inspections conducted.

Permit Requirement 4.2.3.11. IDDE employee training

Objective: Develop and implement an IDDE training program for employees.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>:

Taylorsville City's Engineering Department will develop an IDDE training program and will train annually City employees that as part of their normal job responsibilities might come into contact with or observe an illicit discharge or illicit connection to the MS4 as well as office personnel who might receive initial reports of illicit discharges. The IDDE training will include how to identify a spill, an improper disposal, or an illicit connection to the MS4 and proper procedures for reporting the illicit discharge. Refer to section 4.2.6.9. for

more program- specific details.

Permit Requirement 4.2.3.12.

Taylorsville City's Engineering Department understands:

"The Division reserves the right to request documentation or further study of a particular non-storm water discharge of concern, to require a reasonable basis for allowing the non-storm water discharge and excluding the discharge from the Co-Permittee's program and to require inclusion of the discharge in the Co-Permittee's program, if water quality concerns can not otherwise be reasonably satisfied."

CHAPTER FOUR

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM

This chapter will summarize Taylorsville City's approach for addressing the Construction Site Storm Water Runoff Control minimum control measure (Permit Requirement 4.2.4.).

The Construction Site Storm Water Runoff Control Program section of the SWMP addresses water quality concerns for construction sites greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Public and private projects, including projects proposed by the City's own departments and agencies will comply with these requirements.

CONSTRUCTION SITE PROGRAM ORDINANCE

Permit Requirement 4.2.4.1. Ordinance for erosion and sediment control practices

<u>Objective</u>: Require the use of erosion and sediment control practices at construction sites through ordinances or other regulatory mechanism.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City has a draft storm water ordinance that requires the use of erosion and sediment control practices at construction sites and includes appropriate sanctions to ensure compliance. The ordinance applies to any kind of land disturbance activities that disturb an area greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

The ordinance will require compliance with all the terms of the new Utah Pollutant Discharge Elimination System (UPDES) permit renewal UTR300000 Storm Water General Permit for Construction Activities.

Year	Measurable goal action summary: 1. Adopt ordinance 2. Document updates to the ordinance 3. Document any investigation efforts and enforcement actions taken under this ordinance
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.4.1.1. SWPPP requirements

<u>Objective</u>: Require construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs.

Implementation and Assessment:

Taylorsville City's storm water draft ordinance requires the construction operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply sediment and erosion control BMPs to protect water quality, reduce the discharge of pollutants, and control waste. The proposed ordinance requires that the SWPPP documents must be submitted using the latest version of the SWPPP template posted on the Utah Department of Environmental Quality Division of Water Quality web site.

The SWPPP requirements in the ordinance shall be in compliance with all the terms of the latest UPDES UTR300000 Storm Water General Permit for Construction Activities.

Permit Requirement 4.2.4.1.2. Inspection access to private properties

<u>Objective</u>: Provision for access by qualified personnel to inspect construction sites and BMPs on private properties that discharge to the MS4 through the ordinance or other regulatory mechanism.

Implementation and Assessment:

Taylorsville City's storm water draft ordinance includes provision for City or contracted personnel to access permitted sites for the purpose to ensure compliance with the City ordinance.

Permit Requirement 4.2.4.1.3. Requiring a UPDES Storm Water Permit

<u>Objective</u>: Require construction sites with a land disturbance greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to obtain a UPDES Storm Water Permit.

<u>Implementation and Assessment:</u>

Taylorsville City's storm water draft ordinance requires that any construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to obtain a UPDES Storm Water Permit (UPDES General Permit No. UTR 300000) prior to local permit approval and issuance.

CONSTRUCTION SITE PROGRAM ORDINANCE ENFORCEMENT

Permit Requirement 4.2.4.2. Ordinance enforcement strategy

Objective: Develop enforcement provisions in the ordinance for construction site storm water runoff control.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's proposed storm water ordinance provides the mechanism for the code enforcement agent to get compliance from operators of land disturbance activity sites.

Permit Requirement 4.2.4.2.1. Enforcement procedures plan

Objective: Develop and implement plans to enforce controls for construction site storm water runoff.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department is developing and will adopt written standard operating procedures (SOPs) for specific processes and sanctions to minimize the occurrence of violations, and obtain compliance from violators. The plan will include appropriate, escalating enforcement procedures and actions. Refer to Appendix A for the referenced SOP.

Permit Requirement 4.2.4.2.2. Tracking enforcement actions

Objective: Document and track enforcement actions.

Implementation and Assessment:

Taylorsville City's Engineering Department will document and track all of the enforcement actions linking the electronic documents to GIS mapping.

Year	Measurable goal action summary: 1. Document any investigation efforts and enforcement actions taken under this ordinance
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

PRE-CONSTRUCTION SWPPP REVIEW

Permit Requirement 4.2.4.3. SWPPP review procedures

Objective: Develop and implement plans to enforce SWPPP pre-construction reviews.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department will develop and implement SOPs for pre-construction SWPPP review. The City will keep records for all construction sites required to obtain a land disturbance permit to ensure plans are complete and in compliance with State and Local regulations. Records of these projects will be kept on file for five years or until construction is completed, whichever is longer.

The Land Disturbance Permit will not be issued until every item on the SWPPP pre-construction review checklist is correct.

SWPPP review procedures:

After the Land Disturbance Permit pre-application meeting, Taylorsville's Engineering Department

requests that the SWPPP be submitted electronically on "word" format,

- The Community Development Department creates an electronic file for the project being reviewed,
- The Engineering Department creates an entry on the database used to track land disturbance sites,
- The GIS Coordinator enters the site location on a GIS map,
- The Engineering Department uses a SWPPP checklist to check the submitted SWPPP and selected BMPs for completeness,
 - o Correct information on the SWPPP is marked on the checklist as "Yes"
 - Missing information on the SWPPP is marked on the checklist as "No" and a request is made to address the missing information, an explanation of what is missing is written on the "description" column of the checklist,
- Redline comments are also noted directly on the SWPPP,
- SWPPP drawings are reviewed and comments are noted,
- The reviewed SWPPP and checklist are sent back to the applicant for corrections to be made
- The SWPPP is resubmitted for approval based on compliance with comments

Permit Requirement 4.2.4.3.1. SWPPP pre-construction review meeting

Objective: Conduct a SWPPP pre-construction review.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department will conduct a pre-construction SWPPP review meeting that will include a review of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned post-construction BMPs to manage runoff created after development.

The SWPPP preconstruction meeting between the SWPPP Inspector and the site operator will review the following items:

- Sensitive areas to be protected,
- Receiving waters,
- Potential sources of pollution,
- Endangered species and historic preservation,
- Erosion and sediment controls BMPs,
- Good housekeeping BMPs,
- Post-construction BMPs,
- Inspection schedule,
- SWPPP and SWPPP amendment log,
- Copy of NOI as submitted to the State,
- Pre-construction checklist.
- Construction Storm Water Inspection form,
- City enforcement procedures and ordinances

Permit Requirement 4.2.4.3.2. SWPPP water quality impacts checklist

Objective: Review each SWPPP for potential water quality impacts.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department will review each SWPPP considering the potential water quality impacts. To ensure that all the proper SWPPP BMPs and documentation is included on this document before the land disturbance permit is issued, the City will follow the Storm Water Inspection

Form checklist for each review. The checklist is found on the State of Utah DEQ website at http://www.waterquality.utah.gov/UPDES/stormwatercon.htm.

Permit Requirement 4.2.4.3.3. LID opportunities

Objective: Evaluate opportunities for use of low impact design (LID) and green infrastructure in each SWPPP.

<u>Implementation and Assessment:</u>

Taylorsville City's Engineering Department will encourage the use of LID BMPs and green infrastructure to be incorporated into the site design when the opportunity exists as part of the SWPPP review. Details will be further addressed in section 4.2.5

Permit Requirement 4.2.4.3.4. Priority construction sites

Objective: Identify priority construction sites.

Implementation and Assessment:

Taylorsville City's Engineering Department will identify sites that discharge directly into waters of the State as priority construction sites. The Land Disturbance permit will contain a box that, if checked by the City Engineer, the site will be designated as a priority site.

CONSTRUCTION SITE INSPECTION

Permit Requirement 4.2.4.4. SOPs for site inspections and enforcement

<u>Objective</u>: Develop and implement plans for construction site inspection and enforcement of construction storm water pollution control measures.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department will develop and implement SOPs for construction site inspection and enforcement of construction storm water pollution control measures. The City's Engineering Department SWPPP inspector is the person with authority to implement enforcement procedures. Enforcement procedures will be initiated by the SWPPP inspector and may require assistance from the Code Enforcement Officer when all efforts to gain voluntary compliance have been exhausted. The Code Enforcement Officer may issue a citation based on the proposed City Ordinance [number].

Procedures for an inspection and enforcement are as follows:

<u>Inspection procedures:</u>

- 1. The SWPPP inspector will open an electronic file for each SWPPP inspection. The file will include a copy of the SWPPP Construction Storm Water Inspection Form, pictures, maps, and other pertinent information gathered.
- 2. The SWPPP inspector will pre-fill the known fields of the SWPPP Construction Storm Water Inspection Form.
- 3. The SWPPP inspector will review the SWPPP and identify all BMPs prior to inspecting the site.
- 4. At the time of inspection, the SWPPP inspector will introduce him/herself to the site operator and review the SWPPP template and fill in the fields of the SWPPP compliance inspection form that pertain to record keeping.

- 5. The SWPPP Inspector will conduct a field inspection and populate the fields of the SWPPP Construction Storm Water Inspection Form that have to do with erosion, sediment and good housekeeping controls. Site conditions will be documented with pictures and narrative descriptions of deficiencies:
 - a. Collect information by observing and asking questions to obtain new information about management practices, construction techniques or a piece of equipment.
 - b. Evaluate actual implementation and maintenance of BMPs on-site compared to how it's detailed in the SWPPP.
 - c. Document evidence of poor BMP maintenance, installation or practices with pictures for inclusion in the site inspector's report.
 - d. No solutions or products shall be recommended. It is the responsibility of the site operator/responsible person to implement a workable solution to a compliance problem.
- 6. Review data gathered and finish the written comments and corrective actions as part of the inspection form.
- 7. Meet with the site operator to review SWPPP Construction Storm Water Inspection Form and time frame to have deficiencies repaired:
 - a. Clearly communicate expectations and consequences.
 - b. Give a reasonable time frame to correct the deficiencies identified depending on the level of risk to water quality.
 - c. Advise that Taylorsville City reserves rights to future enforcement actions if determined necessary.
- 8. Have the site operator sign the SWPPP Construction Storm Water Inspection Form.
- 9. Provide a printed inspection report with pictures, maps, et. al. to the site operator.
- 10. Record the SWPPP Construction Storm Water Inspection Form and report into the appropriate computer database.

Enforcement Procedures:

If a deficiency is observed and noted during a SWPPP construction storm water inspection or any other site visit the inspector may request SWPPP compliance verbally or through the inspection report. If the request is not taken care of within the time frame allowed, the SWPPP inspector will initiate enforcement procedures that include the following actions (Draft City Ordinance Section 9):

- 1. Notice of Violation (NOV): The City Engineer may serve an NOV for any violation of ordinance or permit. An explanation of the violation and plan for satisfactory correction and prevention must be submitted within ten (10) days of the issuance of the NOV.
- 2. Legal Action with escalating penalties:
 - a. First day warning of violation, without actual discharges to the City Storm Drain System, is considered Level I Violation or infraction subject to a \$0 Fine.
 - b. Red Tag.
 - c. Second day of violation after warning, without actual discharges to the City Storm Drain System, is considered Level I Violation or infraction subject to a \$100 Fine.
 - d. Third day of violation after warning, without actual discharges to the City Storm Drain System, is considered Level I Violation or infraction subject to a \$300 Fine.
 - e. If the situation is not corrected after the third day it shall be elevated to a Level II Violation and follow the procedures listed below.
 - f. First day with illegal discharges to the City Storm Drain System is Level I Violation or infraction subject to a \$500 Fine.
 - g. Second day with illegal discharges to the City Storm Drain System is a Level II Violation or Class C misdemeanor and shall be punishable by a fine in a sum not to exceed seven hundred fifty dollars (\$750.00), or by imprisonment for a period not longer than ninety (90) days, or by both such fine and imprisonment.

- h. Each additional day is an additional Class C misdemeanor until 7 days.
- i. After 7 days it becomes a Level III Violation or Class B Misdemeanor and shall be punishable by a fine in a sum not to exceed one thousand dollars (\$1,000.00), or by imprisonment for a period not longer than six (6) Months, or by both such fine and imprisonment.
- j. Each additional day is an additional Class B misdemeanor.
- k. When a person is convicted of a violation, any license previously issued to him by the City may be revoked by the court or by the governing body.
- If, as the result of the violation of any provision of this chapter, the city or any other party suffers damages, fines, incurs investigative or clean-up costs, or is required to make repairs and/or replace any materials, the cost of investigations, fines, repair or replacement shall be borne by the party in violation, in addition to any criminal fines and/or penalties.
- m. Repeat offenders (3 or more level I or greater violations within 24 months) or those with unpaid fines shall be ineligible to pull a permit for a period of one year of last offence and all fines are paid.
- n. If there are three violations at any level within 24 months the next violation is automatically escalated by one level.

3. Other remedies:

- a. Violations and Civil penalties can be assessed in accordance with the City Storm Water Ordinance (Section 10).
- b. Consent Orders, Compliance Orders, and Cease and Desist Orders

Documentation is critical to effective enforcement. It is the responsibility of the SWPPP inspector to maintain time limits, timely follow-up inspection is critical.

Permit Requirement 4.2.4.4.1. Inspect new construction sites

Objective: Inspect all new construction sites.

Implementation and Assessment:

Taylorsville City's Engineering Department will inspect all construction sites with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development of sale at least monthly by qualified Construction Storm Water Inspection Form checklist found on the State of Utah DEQ website at http://www.waterquality.utah.gov/UPDES/stormwatercon.htm.

Permit Requirement 4.2.4.4.2. Inspect phases of construction

Objective: Inspect all phases of construction.

<u>Implementation and Assessment:</u>

Taylorsville City's SWPPP Inspector will inspect all phases of construction until the termination of the project.

The SWPPP Inspector will require completed and approved SWPPP prior to allowing construction to commence. No inspections or permits will be issued until SWPPP is in place and functioning. Inspections will occur at least monthly during active construction.

Procedures for termination notification by operator of a permitted site to verify the final stabilization and

removal of all temporary control measures are as follows:

- The SWPPP Inspector will conduct a final inspection to confirm that the site is clean, has been stabilized, all temporary BMPs have been removed, and all structural BMPs have been installed according to the approved plans.
- The SWPPP Inspector will require submission of NOT to the City and State (as appropriate).
- The SWPPP Inspector will require contract information for those in charge of Long Term Storm Water Management on the site.
- Final approval or occupancy Permit will not be issued until final items are complete, NOT is received and Maintenance Agreement is signed and recorded.

Permit Requirement 4.2.4.4.3. Priority construction site inspections

Objective: Inspect priority construction sites biweekly.

<u>Implementation and Assessment:</u>

Taylorsville City's SWPPP Inspector will inspect sites identified as priority construction at lease biweekly using the Construction Storm Water Inspection Form checklist found on the State of Utah DEQ website at http://www.waterquality.utah.gov/UPDES/stormwatercon.htm.

Permit Requirement 4.2.4.4.4. Ensure compliance in enforcement strategy

Objective: Take necessary follow-up actions to ensure compliance.

Implementation and Assessment:

Taylorsville City's SWPPP Inspector will, based on site inspection findings, take all necessary follow-up actions (i.e. re-inspection, enforcement) to ensure compliance in accordance with the proposed City Ordinance and SOPs. Enforcement actions will be tracked and documented on Utilisync.

STAFF TRAINING

Permit Requirement 4.2.4.5. Train staff

Objective: Train staff involved in implementing the construction storm water program.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department will train staff whose primary job duties are related to implementing the construction storm water program, including permitting, plan review, construction site inspections and enforcement.

The training will be conducted by the Engineering Department or a third party. Third party training session regarding SWPPP development, review and management, BMP selection and maintenance; SWPPP inspections and other topics may be offered through the SL County Storm Water Coalition, the Utah Storm Water Advisory Committee (USWAC), or American Public Works Association (APWA) as demand dictates.

Training records will include dates, course description and names and positions of staff in attendance.

Year	Measurable goal action summary: 1. Document training dates, staff attending and course description.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

RECORD KEEPING

Permit Requirement 4.2.4.6. Maintain records

Objective: Develop and implement procedure to maintain records of projects.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>:

Taylorsville City's Engineering Department will develop and implement an SOP to maintain records of all projects disturbing an area greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The records include: site plan reviews, SWPPPs, inspections and enforcement actions including verbal warnings, stop work orders, warning letters, notices of violation, and other enforcement records. Records of these projects will be kept for five years or until construction is completed, whichever is longer. Refer to Appendix X for the referenced SOP.

CHAPTER FIVE

LONG-TERM STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT (POST-CONSTRUCTION STORM WATER MANAGEMENT)

This chapter will summarize Taylorsville City's Post-Construction Storm Water Management (Permit Requirement 4.2.5.).

The Post-Construction Storm Water Management in the New Development and Redevelopment Program addresses the importance of storm water runoff management in new development and redevelopment projects (land disturbance of greater than or equal to one acre). The program includes sites less than one acre that are part of a larger common plan of development. The BMPs described in this section of the SWMP include the development of structural and non-structural storm water runoff strategies, development of ordinances regarding post-construction, and the inclusion of requirements to consider water quality impacts of new development and redevelopment projects in the comprehensive land use master planning process.

The objective of this program is for the hydrology associated with the new development to mirror the predevelopment hydrology of the previously undeveloped site or to improve the hydrology of a redeveloped site and reduce the discharge of storm water. The program shall be developed, implemented and enforced by January 31th, 2020.

Year	Measurable goal action summary: 1. Develop and implement program by January 31th, 2020. 2. Document updates.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

POST-CONSTRUCTION STORM WATER MANAGEMENT ORDINANCE

Permit Requirement 4.2.5.1. Ordinance for long-term post-construction storm water controls

<u>Objective:</u> Require long-term post-construction storm water controls at new development and redevelopment construction sites through ordinances or other regulatory mechanism.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment:

Taylorsville City's Engineering Department has a draft ordinance and will adopt the post-construction ordinance to address storm water controls at new development and redevelopment sites. The proposed City Ordinance "[XXX] Stormwater Management Section 5. Post Construction" will be equivalent with the technical requirements set forth in the UPDES Storm Water General Permit for Construction Activities, UTR300000.

The structural post-construction BMP selection, design, installation and operation for each site will be reviewed to make sure it will perform adequately in the soil and terrain conditions for the construction BMPs to minimize impacts from development runoff to the MS4.

Maintenance of post-construction facilities is addressed on the proposed City Ordinance "[XXX] Stormwater Management Section 5. Post Construction."

Year	Measurable goal action summary: 1. Adopt ordinance 2. Document updates to the ordinance
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

PROCEDURES FOR ENFORECEMENT OF BMPS

Permit Requirement 4.2.5.2. Enforcement responsibilities

Objective: Develop and implement an enforcement strategy based on the post-construction ordinance.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Enforcement procedures will be initiated by the SWPPP Inspector and may require assistance from the Code Enforcement Officer when all efforts to gain voluntary compliance have been exhausted, the Code Enforcement Officer will then issue a citation based on proposed City Ordinance "[XXX] Stormwater Management Section 9.Enforcement."

Permit Requirement 4.2.5.2.1. Enforcement procedures and actions

<u>Objective</u>: Develop procedures that include specific processes and sanctions to address chronic and recalcitrant violators.

<u>Implementation and Assessment</u>: The procedures to gain compliance from chronic and recalcitrant violators will vary from case to case and will include appropriate, escalating enforcement procedures and actions specific. The enforcement options are detailed in the proposed City Ordinance "[XXX] Stormwater Management Section 9.Enforcement."

Permit Requirement 4.2.5.2.2. Documentation for post-construction BMP requirements

<u>Objective</u>: Document how the requirements of the ordinance will protect water quality and reduce the discharge of pollutants to the MS4.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department will document how the requirements of post-construction BMPs will protect water quality and reduce the discharge of pollutants to the MS4. Documentation will include:

- How long-term storm water BMPs were selected
- The pollutant removal expected from the selected BMPs; and
- The technical basis which supports the performance claims for the selected BMPs

Taylorsville has adopted the Salt Lake County BMPs for use within the City. The Guidance Document and individual BMPs are accessible on the Salt Lake County website

(http://www.pweng.slco.org/stormwater/html/guide.html). Each BMP details the following information:

- Description of the BMP
- Application
- Installation Criteria
- Limitations of the BMP
- Maintenance required for the BMP

REQUIREMENTS FOR NEW DEVELOPMENT/REDEVELOPMENT PROGRAM

Permit Requirement 4.2.5.3. Development/ redevelopment program

Objective: Develop development/redevelopment program to prevent or minimize impacts to water quality.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department will create requirements and standards to ensure that any storm water controls or management practices for development and redevelopment projects will prevent or minimize impacts to water quality.

Permit Requirement 4.2.5.3.1. Non-Structural BMPs

Objective: Develop non-structural BMPs in development/redevelopment program to minimize development & disturbance, preserve, and protect sensitive areas.

<u>Implementation and Assessment:</u> The post-construction storm water controls requirements and standards will include non-structural BMPs to:

- Minimize development in areas susceptible to erosion and sediment loss;
- Minimize the disturbance of native soils and vegetation;
- Preserve areas in the municipality that provide important water quality benefits;
- Implement measures for flood control; and
- Protect the integrity of natural resources and sensitive areas.

Taylorsville City will include non-structural BMPs in its approved list of BMPs. The BMPs will be located on the City website.

Taylorsville City's proposed storm water ordinance has language that minimizes development in areas because of topography, slope, soil conditions and other natural features that are considered to be environmentally fragile. Development of wetlands or areas adjacent to wetlands is regulated through the US Army Corp of Engineers and requires delineation and approval prior to any City approvals.

Permit Requirement 4.2.5.3.2. Low Impact Development (LID) approach

<u>Objective:</u> Include a program to evaluate and encourage a LID approach for new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

Implementation and Assessment: Taylorsville City's Engineering Department will include a process to evaluate and encourage a LID approach that encourages the implementation of structural BMPs, where practicable, that infiltrate, evapotranspire or harvest and use storm water from the site to protect water quality. Structural controls may include green infrastructure practices such as rainwater harvesting, rain gardens, permeable pavement, and vegetated swales. The selection design of post-construction controls will take into consideration clogging or obstruction issues, freeze-thaw problems, effect on slope stability and groundwater, and the ability to effectively maintain the control.

If LID practices are proposed to be used on a site, the Engineering Department will review and evaluate the proposal to make sure it will perform adequately in the soil and terrain conditions for the particular site before considering approval.

Permit Requirement 4.2.5.3.3. Retrofit existing developed sites

Objective: Develop a plan to retrofit existing developed sites that are adversely impacting water quality.

Implementation and Assessment: Taylorsville City's Engineering Department will develop a plan, by March 1st, 2020, to retrofit existing developed sites that are adversely impacting water quality. The retrofit plan will be developed to emphasize controls that infiltrate, evapotranspire or harvest and use storm water discharges. The plan will include a ranking of control measures to determine those best suited for retrofitting as well as those that could later be considered for retrofitting. The Engineering Department will include the following when developing the criteria for the retrofit plan:

- Proximity to water body;
- Status of water body to improve impaired water bodies and protect unimpaired water bodies;
- Hydrologic condition of the receiving water body;
- Proximity to sensitive ecosystem or protected area; and
- Any upcoming sites that could be further enhanced by retrofitting storm water controls.

Year	Measurable goal action summary: 1. Develop plan by March 1 st 2020 2. Document number of sites retrofitted
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	

7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.5.3.4. Hydrologic method

<u>Objective:</u> Develop and define specific methods for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs.

<u>Implementation and Assessment:</u> Taylorsville City's Engineering Department currently using a specific hydrologic method for calculating runoff volumes and flow rates to ensure consistent sizing of structural BMPs to facilitate plan review.

Hydrologic method for calculating runoff volume and flow rates is detailed in the Taylorsville "13.21.070: Drainage Systems: Surface water runoff drainage systems shall be designed to handle all runoff generated within the subdivision by a 10-year, 3-hour storm and routing of water generated by a 100-year, 72-hour storm. Such systems shall be designed and installed by the developer according to city standards."

SITE PLAN REVIEW OF POST-CONSTRUCTION STORM WATER CONTROLS

Permit Requirement 4.2.5.4. Prior to construction

<u>Objective:</u> Adopt and implement procedures for site plan review which incorporate consideration of impacts to water quality.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department has procedures in place for review the proposed post-construction BMPs to address water quality impacts.

Permit Requirement 4.2.5.4.1. Review Storm Water Pollution Prevention Plans (SWPPPs)

<u>Objective:</u> Review SWPPPs for all new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale to ensure that the plans include long-term storm water management minimum control measures.

<u>Implementation and Assessment</u>: Prior to construction, Taylorsville City's Engineering Department reviews the SWPPs for all new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale to ensure that plans include long-term storm water management measures that meet City requirements.

Permit Requirement 4.2.5.4.2. Preferred design specifications

<u>Objective:</u> Provide developers and contractors with preferred design specifications to effectively treat storm water for different development types.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department will adopt preferred design criteria for post construction BMP controls to more effectively treat storm water discharges by January 2020. Prior to construction, the Engineering Department will provide developers and contractors with preferred

design criteria to more effectively treat storm water for different development types such as industrial parks, commercial strip malls, retail gasoline outlets, restaurants, parking lots, automotive service facilities, street and road construction, and projects located near or that discharge to, environmentally sensitive areas.

Permit Requirement 4.2.5.4.3. Information share

Objective: Keep a representative copy of information as provided to design professionals.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department will keep a representative copy of information that is provided to design professionals. The City does not plan on mailing information to a large number of design professionals. Rather design professionals will be directed to the City website where they can download pertinent information. Training seminars may be offered through thee Salt Lake County Stormwater Coalition. Attendance and material presented will be documented for these seminars.

STANDARD OPERATING PROCEDURES (SOPs) FOR INSPECTIONS AND ENFORCEMENT OF POST-CONSTRUCTION STORM WATER CONTROL MEASURES

Permit Requirement 4.2.5.5. Adopt and implement SOPs

Objective: Adopt and implement SOPs for site inspection and enforcement of post-construction storm water control measures.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department will adopt and implement SOPs for site inspection and enforcement of post-construction storm water control measures. These procedures will ensure adequate ongoing long-term operation and maintenance of approved private and City owned or operated storm water control measures.

The SOPs to get compliance from operators of post-construction BMPs through inspections and enforcement are described as follows:

- Post-construction BMPs owner information, location, maintenance schedule and other information are entered on the post-construction facilities data base;
- Inspections are scheduled according to the importance of the post-construction BMP or according to the maintenance agreements;
- Inspections are conducted by City Personnel using the Post-Construction Facility Inspection Report;
- After a site inspection or upon a violation to the post-construction BMP maintenance requirements is found:
 - A specific amount of time is given to the operator to correct the deficiency either on the written report or verbally, if not corrected;
 - An NOV is issued describing the violation to be corrected and additional time is given to correct the deficiency with the threat to issue a citation, if not corrected with in time frame given;
 - A citation is issued to appear in court to face possible fines even after the deficiency is corrected, if problem persists;
 - The City will repair the deficiency and will back charge the operator or place a lean on the property for the cost of the repairs made.

Year	Measurable goal action summary: 1. Annual review of the inspection and enforcement SOPs 2. Document number of sites inspected.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.5.5.1. Construction-phase and post-construction access

<u>Objective:</u> Implement provisions to allow both construction-phase and post-construction access to inspection storm water control measures on private properties that discharge to the MS4 to ensure that adequate maintenance is being performed.

Implementation and Assessment: The procedures to gain access to a private site that discharges to the MS4 and inspect storm water control measures to ensure that adequate maintenance is being performed are detailed on the proposed City Ordinance(s) ([XXX] Stormwater Management Section 5. Post Construction). The proposed City Ordinance section "5.3" allows the facility owner/ operator or qualified third parties, through a legal agreement, to conduct maintenance and provide annual certification that adequate maintenance has been performed and the structural controls are operating as designed to protect water quality. The agreement also allows the City to conduct oversight inspections of the storm water control measures and also account to transfer of responsibility in deeds.

The agreement also allows the City to perform necessary maintenance or corrective actions neglected by the property owner/ operator, and bill or recoup costs from the property owner/ operator as needed.

Permit Requirement 4.2.5.5.2. BMP inspections during installation

Objective: Inspect permanent structural BMPs at least once during installation.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department will inspect and document structural BMPs at least once during installation by the SWPPP Inspector.

Permit Requirement 4.2.5.5.3. Inspections and maintenance

<u>Objective:</u> Annual inspections and maintenance will be conducted by Taylorsville City or through the City's maintenance agreement with the property owner/ operator.

Implementation and Assessment: Taylorsville City's Engineering Department will inspect and maintain structural BMPs owned or operated by the City annually using the attached form. Facilities that are owned/operated by a private entity will be inspected and maintained by the owner/operator as specified in a maintenance agreement with the City. The City's SWPPP Inspector will inspect the storm water controls at least once every five years, or as specified in the maintenance agreement. Inspections will be documented on the SWPPP GIS map.

Findings will be documented on an inspection report that will include the following information:

- Inspection Date;
- Name and signature of inspector;
- Project location;
- Current ownership information;
- A description of the condition of the storm water control measure including the quality of:
 - Vegetation and soils;
 - o Inlet and outlet channels and structures;
 - o Catch basins;
 - Spillways;
 - o Weirs;
 - Other control structures; and
 - Sediment and debris accumulation;
- Specific maintenance issues or violations found that need to be corrected by the owner/ operator along with deadlines and re-inspection dates.

POST-CONSTRUCTION STORM WATER TRAINING

Permit Requirement 4.2.5.6. City personnel training

<u>Objective:</u> Provide training for all staff in post-construction storm water management, planning and review, and inspections and enforcement.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department will provide adequate training for all staff in post-construction storm water management, planning and review, and inspections and enforcement.

The training will provide the fundamentals of long-term storm water management through the use of structural and non-structural control methods. Training will include reviewing the proposed City Ordinance post-construction maintenance and inspections section "[XXX]."

Year	Measurable goal action summary: 1. Document and maintain training records including: training date, course description, and names and positions of staff in attendance.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

POST-CONSTRUCTION STORM WATER INVENTORY

Permit Requirement 4.2.5.7. Inventory of post-construction structural BMPs

<u>Objective:</u> Maintain an inventory of all post-construction structural storm water control measures installed and implemented at new development and redeveloped sites that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department will maintain an inventory of all post-construction structural storm water control BMPs throughout the City. This inventory will include both public and private sites located within the City boundaries and service areas.

Permit Requirement 4.2.5.7.1. Basic inventory information

<u>Objective:</u> Inventory entries will include basic information including project name, owner name and contact information, location, and start/ end date.

<u>Implementation and Assessment</u>: Each inventory entry will include basic information as follows:

- Project name;
- Owner's name and contact information;
- Location;
- BMP description
 - o Storm water control measure (type, number, design or performance specifications);
 - o Maintenance requirements (frequency of inspections and maintenance);
 - o Installation date; and
 - o Inspection history.

Permit Requirement 4.2.5.7.2. Inventory updates

<u>Objective:</u> Inventory entries will be updated, as needed, when changes occur in property ownership or BMP policy.

<u>Implementation and Assessment</u>: Based on inspections conducted, Taylorsville City's Engineering Department will update the inventory as needed when changes occur in property ownership or changes to the control structural post-construction BMPs.

CHAPTER SIX

POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAM FOR MUNICIPAL OPERATIONS

This chapter will summarize Taylorsville City's Pollution Prevention and Good Housekeeping for Municipal Operations (Permit Requirement 4.2.6.).

The Pollution Prevention/ Good Housekeeping Program of the Storm Water Management Plan addresses routine activities in the operation and maintenance for City owned facilities, drainage systems, roadways, parks and open spaces, and other municipal operations to reduce pollutants entering the storm drain systems.

The program will implement BMPs to address specific roadway practices such as snow removal, de-icing, salt pile management and road crew training. This program will also focus on storm drainage system maintenance, structural floatable controls, maintenance yard practices, flood control projects, litter ordinance development, pesticide, herbicide and fertilizer program and spill prevention and response.

All of the components of the O&M program will be included in this document, it will identify the department and the staff responsible for performing each activity described in this section. Taylorsville City's Engineering Department will review the inventory annually and update as necessary.

Currently, Taylorsville City has established a contract with Salt Lake County Public Works Department to provide to the City storm drain inspection and storm drain maintenance services. Salt Lake County employees are required to inspect and make any repairs to the municipal storm drain system every thirty (30) days. Taylorsville City will require Salt Lake County to provide personnel training and education necessary to properly work on the City's storm drain system.

Permit Requirement 4.2.6.1. Inventory of City owned or operated facilities

Objective: Create an inventory of City owned facilities.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department in conjunction with Salt Lake County Public Works Department will create an inventory of City owned facilities. This list will be reviewed annually and updates as necessary. The care and maintenance of each facility will be assigned to a Division or Department for its care and maintenance. The list will include:

- Parks and open space
- Material storage yards
- Pesticide storage facilities
- Public buildings, including libraries, police stations, fire stations, municipal buildings, etc.
- Parking lots
- Golf courses
- Swimming pools
- Public works yards
- Salt storage facilities
- Street repair and maintenance sites

- Vehicle maintenance and storage yards
- Structural storm water controls
- Other

Facilities covered under the General UPDES Permit for Storm Water Discharges Associated with Industrial Activities do not need to develop an O&M program but must instead maintain the Storm Water Pollution Prevention Plan (SWPPP) required by that permit.

INVENTORY OF CITY OWNED FACILITIES

Engineering Department

Buildings

•	Taylorsville City Hall	2600 West Taylorsville Blvd
•	Taylorsville Senior Citizen Center	4764 South Plymouth View Dr
•	Taylorsville Bennion Heritage Center	1488 West 4800 South

Parks & Recreation

KS &	& Recreation	
•	Azure Meadows	6064 South 3885 West
•	Millrace Park	1181 West 5400 South
•	Freedom Shrine	631 West 4500 South
•	N. River Trail (w/ SL Co.)	650 West 4500 South
•	UP&L Corridor Trail (w/ Rocky Mt Power)	951 West 4800 South
•	Bennion Park	5620 South 3200 West
•	Autumn Meadows	5352 South 2200 West
•	Vista Park Baseball Complex (w/ SL Co.)	2051 West 5000 South
•	Taylorsville Park (w/ SL Co.)	4750 South Redwood Road
•	Future Park	6074 South 3200 West
•	Park at City Center	2600 West Taylorsville Blvd
•	Taylorsville/Bennion Heritage Center	1488 West 4800 South
•	Labrum Park	6041 South Jordan Canal Rd

<u>Cemeteries</u>

• Taylorsville City Cemetery 4567 South Redwood Rd

Golf Course

•	Fore Lakes Golf Course	1258 West 4700 South
•	Meadowbrook	4197 South 1300 West

Permit Requirement 4.2.6.2. Pollutant discharge potential assessment

<u>Objective:</u> Assess the written inventory identified in Part 4.2.6.1. for their potential to discharge typical urban pollutants to the storm water.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment: Taylorsville City's Engineering Department in conjunction with City Department and Divisions and Salt Lake County will assess the City owned facilities and operations annually, for their potential to discharge to storm water systems the following typical urban pollutants: sediment, nutrients, metals, hydrocarbons (e.g. benzene, toluene, ethylbenzene and xylene), pesticides, chlorides, herbicides and fertilizer, chlorine, road salts, trash, bacteria, organic matter, and additional pollutants associated with its facilities that could be found in storm water discharges. A description of the assessment process and findings will be included in each facility Assessment.

HIGH PRIORITY FACILITIES AND ACTIVITIES

Permit Requirement 4.2.6.3. High priority facilities identification

<u>Objective:</u> Identify "high-priority" facilities or operations that have a high potential to generate storm water pollutants.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment: Taylorsville City's Engineering Department will identify as "high priority" those City owned facilities or operations that have a high potential to generate storm water pollutants as described in Part 4.2.6.2. The factors that will be considered in giving a facility a high priority ranking will include the amount of urban pollutants stored at the site, the identification of improperly stormed materials, activities that must be performed outside, proximity to water bodies, poor housekeeping practices, and discharge of pollutants of concern to impaired waters.

Permit Requirement 4.2.6.4. High priority facilities development of SOPs

Objective: Develop facility-specific standard operating procedures (SOPs).

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Each City Department or Division in charge of a "high priority" facility or operation identified in accordance with Part 4.2.6.3. will develop or update the maintenance and activity operation specific standard operating procedure (SOP). The SOPs will include storm water pollution prevention and good housekeeping BMPs that, when applied to the municipal operation or facility will protect water quality and reduce the discharge of pollutants to the MS4. Low impact development (LID) techniques will be considered when creating and reviewing the SOPs.

Permit Requirement 4.2.6.4.1. Buildings and facilities O&M Program and SOPs

<u>Objective:</u> The O&M program will address City owned or operated buildings and utilities and the SOPs will address training the personnel responsible for handling products and implementing SOPs.

Implementation and Assessment: Taylorsville City's O&M program will include: City owned or operated offices, parking lots, and other buildings or utilities. Each Department or Division that has an impact on storm water discharging to the municipal separate storm sewer system (MS4), will create or update their O&M Program SOPs to address the following:

- Ensure, through employee training, that those responsible for handling these products understand and implement SOPs for use, storage and disposal of chemicals;
- Ensure that all City owned or operated facilities develop and implement spill prevention plans.
- SOPs address dumpsters and other waste management which includes cleaning, washing, painting, and other maintenance activities;
- Schedules and SOPs are developed for sweeping parking lots and keeping the area surrounding the facilities clean to minimize runoff of pollutants;
- Create and maintain an inventory of all floor drains inside all of the City owned or operated buildings and facilities. The City will ensure all floor drains discharge to appropriate locations;
- Develop and maintain a map of all storm drains located on the property of all City owned or operated buildings and facilities. The City will ensure that only storm water is allowed into these drains and that the appropriate BMPs are in place to minimize pollutants from entering the MS4.

Year	Measurable goal action summary: 1. Create and maintain inventory of all floor drains and storm drain inlets of all City owned or operated facilities.
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

Permit Requirement 4.2.6.4.2. Material storage areas, heavy equipment storage areas and maintenance areas

<u>Objective</u>: Develop and implement SOPs to protect water quality at City owned and operated material storage areas, heavy equipment storage areas and maintenance areas not covered under the General UPDES Permit.

<u>Implementation and Assessment</u>: Each City Department or Division will update and implement SOPs to protect water quality at each City owned or operated facility not covered under the General Permit for Storm Water Discharge Associated with Industrial Activities.

Permit Requirement 4.2.6.4.3. Parks and open space

<u>Objective:</u> Implement pollution prevention and good housekeeping practices at all Parks and Recreation areas and other City owned or operated open spaces through the O&M program.

<u>Implementation and Assessment</u>: The Parks Division in conjunction with Salt Lake County will update its O&M Program SOPs to address:

- Proper application, storage and disposal of fertilizer, pesticides, and herbicides;
- Sediment and erosion control;
- Evaluation of lawn maintenance and landscaping activities to ensure protection of water quality (includes proper disposal of lawn clippings and vegetation and use of alternative landscaping materials such as drought tolerant plants);
- Management of trash containers at parks and other open spaces(includes scheduled garbage pick-up, number of containers, and signage in areas concerning proper disposal of pet wastes);
- Cleaning of maintenance equipment, building exterior, trash containers and the disposal of the associated waste water.

The Parks Division will implement pollution prevention and good housekeeping practices at their facilities.

Permit Requirement 4.2.6.4.4. Vehicle and equipment maintenance

<u>Objective:</u> The O&M program will include SOPs to address vehicle maintenance and repair activities that occur on City owned or operated vehicles.

<u>Implementation and Assessment</u>: All City Departments and Divisions will update their O&M Program SOPs to address vehicle maintenance and repair needs.

- All City-owned facilities that maintain vehicles will include BMPs such as drip pans and absorbents under or around leaky vehicles and equipment is stormed indoors where feasible.
- Vehicle was procedures will be addressed by all Departments and Divisions to ensure that was waters are not discharged to the MS4 or surface waters.

Permit Requirement 4.2.6.4.5. Roads, highways and parking lots

<u>Objective</u>: The O&M program will include SOPs and schedules to maintain roads, highways and parking lot management.

<u>Implementation and Assessment</u>: Taylorsville City contracts with Salt Lake County to perform its street services. The Taylorsville City's Engineering Department will review its procedures annually with the County and update them, if necessary, to address SOPs for:

- Sweeping streets and other BMPs designed to reduce road debris and other pollutants from entering the MS4 including maintenance schedules and disposal methods of waste removed;
- Pothole repairs;
- Pavement marking;
- Sealing and repaving;
- Plowing, sanding and application of deicing compounds, and maintenance of snow disposal areas;
- Right of way maintenance including mowing and herbicide application; and
- Municipal sponsored event clean up (e.g. parades and street fairs)

The Engineering Department, including its Parks Division, O&M Program will be updated to describe in SOP format procedures for:

- Sweeping of parking lots and any other BMPs designed to reduce parking lot debris and other pollutants from entering the MS4; and
- Snow removal, sanding or application of deicing compounds.

Permit Requirement 4.2.6.4.6. Storm water collections and conveyance system

Objective: The O&M program will include SOPs for storm water collections and conveyance management.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department has updated to describe in writing, standard operating procedures for:

- Maintenance of detention ponds; and
- Inspection schedules detention/ retention basins will be inspected annually

The O&M program for storm water has been updated to include Salt Lake County's storm water SOPs to encourage cohesion and consistency in maintenance of the storm water system throughout the County. The program addresses procedures and schedules for the inspection, cleaning and repair of:

- Catch basins;
- Storm water conveyance pipes;
- Ditches and irrigation canals;
- Culverts;
- Structural storm water controls;
- Structural runoff treatment; and
- Flow control facilities.

The City's Engineering Department in conjunction with Salt Lake County will create and maintain storm sewer system maintenance map and schedule to document inspections. This data will be used to designate priority areas that will be maintained more frequently.

The O&M Program SOPs will include proper documentation procedures and disposal methods of all waste and waste water removal from the storm water conveyance system.

Permit Requirement 4.2.6.4.7. Other facilities and operations

<u>Objective</u>: The O&M program will include SOPs for management of other facilities and operations not specified in previous sections.

Implementation and Assessment: Each City Department and Division that has an impact on storm water discharging to the municipal separate storm sewer system (MS4) will create or update its O&M Program SOPs to include facilities and operations not listed previously that would reasonable be expected to discharge contaminated runoff

Year	Measurable goal action summary: 1. The Engineering Department will meet annually with each department to create, review or make changes to the O&M Program SOPs and BMPs. 2. Document meeting dates and outcome of meetings
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

THIRD PARTY MAINTENANCE OF STORM WATER FACILITIES

Permit Requirement 4.2.6.5. Third-party maintenance contracts

<u>Objective</u>: All third-party contracted to conduct municipal or private development maintenance will be contractually held to the City standards.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment: Taylorsville City contracts with the Salt Lake County Public Works, Unified Fire Authority, other municipalities and private firms, and has entered into Interlocal Agreements and contracts to provide a number of services to its City. The City will allow private developments to conduct their own maintenance and inspections of storm water BMPs. All contractors will be held to the same standards the City follows. These expectations will be defined through the proposed City Ordinance "[XXX] Stormwater Management Section 5. Post Construction" to ensure through contractually-required documentation or periodic site visits, that the owner of such storm water BMPs is following SOP to maintain

such controls.

This permit requirement is also covered in section 4.2.5 of this plan.

INSPECTION OF CITY OWNED OR OPERATED FACILITIES

Permit Requirement 4.2.6.6. Inspection requirements

Objective: Each Department's or Division's O&M program will include inspections as detailed below.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Permit Requirement 4.2.6.6.1. Weekly visual inspections

<u>Objective</u>: Each Department's or Division's O&M program will include weekly visual inspections of its facilities.

<u>Implementation and Assessment</u>: Each Department or Division will perform weekly visual inspections of the facilities or areas of the facilities that each department is responsible for in accordance with their O&M Program to minimize the potential for pollutant discharge. Spills must be documented and cleaned up immediately to prevent contact with precipitation or runoff.

The weekly inspections will be tracked in a log by each Department, Division, or facility and records kept in their O&M reporting section(s). The inspection log will include the identified deficiency, the corrective actions taken to remedy the deficiency, and dates of each event.

Copies of these logs will be loaded annually to an electronic file for each department and for the SWMP document.

Permit Requirement 4.2.6.6.2. Quarterly comprehensive inspections

<u>Objective</u>: Each Department's or Division's O&M program will include quarterly comprehensive inspections of its "high priority" facilities.

<u>Implementation and Assessment</u>: Each Department or Division will perform, at least once per quarter, a comprehensive inspection of the "high priority" facilities identified in its O&M Program.

"High Priority" facility inspections will focus specific attention to:

- Waste storage areas;
- Dumpsters;
- Vehicle and equipment maintenance areas;
- Fueling areas;
- Material handling areas; and
- Similar pollutant-generating areas.

The quarterly inspection will be documented and records kept with the O&M Program documentation. The report will include identified deficiencies and the corrective actions taken to remedy the deficiencies. The inspections will be done in accordance to the applicable SOPs.

Copies of these inspections reports will be loaded annually to an electronic file for each department and for the

SWMP document.

Permit Requirement 4.2.6.6.3. Quarterly visual observation of storm water discharges

<u>Objective</u>: A quarterly visual observation of storm water discharges will be conducted for the City's "high priority" facilities.

Implementation and Assessment: Taylorsville City's SWPPP Inspector will visually observe the quality of the storm water discharges from the "high priority" facilities. Any observed problems such as: color, foam, sheen, or turbidity that can be associated with pollutant sources or controls will be remedied to prevent discharge to the storm drain system. Remedies that will require modification to structural controls will be presented to decision makers within the City to approve such changes and temporary remedies will be implemented while the modifications are being made. Visual observations will be documented and records will be kept with the SWMP document.

SOPs for the inspection are as follows:

- Use of the official Discharge Monitoring Report Form;
- Locate monitoring discharge point;
- Collect sample on a glass container;
- Document with pictures: water sample, runoff flow patterns, observed sheen flows, etc.)
- Identify deficiencies and report to the responsible parties
- Responsible part will then report back to the SWPPP Inspector of the corrective actions taken;
- SWPPP Inspector conducts a follow-up inspection to verify correction and finalize report.

Year Measurable goal action summary: 1. Document weekly inspection dates and observations. 2. Document "high priority" facility quarterly inspection dates and observations. 3. Document "high priority" facility visual inspection dates and observations.	
7/1/2019- 6/30/2020	
7/1/2020- 6/30/2021	
7/1/2021- 6/30/2022	
7/1/2022- 6/30/2023	
7/1/2023- 6/30/2024	

FLOOD MANAGEMENT STRUCTURAL CONTROLS

Permit Requirement 4.2.6.7. Flood management controls

<u>Objective</u>: Develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with discharges to the MS4.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment: Taylorsville City's Engineering Department will develop and implement a

process to assess the water quality impacts in the design of all new flood management structural controls that are associated with discharges to the MS4. The process will include consideration of controls that can be used to minimize impacts to site water quality and hydrology while still meeting project objectives. Description of this process is as follows:

- Developer submits proposed flood management structural control method (e.g. detention pond w/ pretreatment);
- Developer submits technical literature from manufacturer of selected pre-treatment control listing the pollutant removal capabilities of said pre-treatment control (e.g. remove floatables, sediment, and hydrocarbons);
- City Engineer reviews submitted technical literature and determines if the selected controls' pollutant removal capabilities are acceptable.

The City Design Standards and Specifications already require that storm water discharge from a development be limited to 0.20 fcs/acre maximum.

Permit Requirement 4.2.6.7.1. Existing flood management

<u>Objective</u>: Develop and implement a process to assess the water quality impacts in the design of all new flood management structural controls that are associated with discharges to the MS4.

<u>Implementation and Assessment</u>: Existing flood management structural controls will be assessed by Taylorsville City's Engineering Department to determine whether changes or additions should be made to improve water quality.

The existing flood management structural controls will be assessed following the process listed below:

- Routine site visits;
- Condition assessment:
 - o Bring concerns to City Engineer's attention,
 - o Engineering Department under direction of the City Engineer determines proper remediation or corrective action.

CONSTRUCTION PROJECTS

Permit Requirement 4.2.6.8. Construction projects

Objective: Public construction projects will comply with the requirements applied to private projects.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

Implementation and Assessment: Public construction projects will comply with requirements applied to private projects. All construction projects disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, owned or operated by Taylorsville City are required to be covered under the General UPDES Permit for Storm Water Discharges Associated with Construction Activities. All public projects approved after the effective date of the said Permit will include construction and post-construction controls selected and implemented pursuant to the requirements in Parts 4.2.4 and 4.2.5. of the Permit.

TRAINING

Permit Requirement 4.2.6.9. Training for employees

<u>Objective</u>: All employees who have primary construction, operation, or maintenance job functions that are likely to impact storm water quality will be trained as necessary to protect water quality.

Resource Allocation: Taylorsville City will allocate resources through the Storm Water Utility Fund.

<u>Implementation and Assessment</u>: Taylorsville City's Engineering Department in conjunction with applicable Departments and Divisions will provide training for all employees who have primary construction, operation, or maintenance job functions that are likely to impact storm water quality.

Training will address the importance of protecting water quality, the requirements of the Jordan Valley Municipalities UPDES UTR000001 Permit addressed in this document, O&M requirements, inspection procedures, ways to perform their job activities to prevent or minimize impacts to water quality, SOPs for the various City owned or operated facilities and procedures for reporting water quality concerns, including potential illicit discharges.